



CIA HISTORICAL REVIEW PROGRAM
RELEASE AS SANITIZED
1999

Soviet Forces and Capabilities for Strategic Nuclear Conflict Through the Year 2000

National Intelligence Estimate

Key Judgments

*These Key Judgments represent the views
of the Director of Central Intelligence
with the advice and assistance of the
US Intelligence Community.*

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NIE 11-3/8-91W
8 August 1991

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The following intelligence organizations participated in the preparation of these Key Judgments:

The Central Intelligence Agency
 The Defense Intelligence Agency
 The National Security Agency
 The Assistant Secretary for Intelligence and Research,
 Department of State
 The Director for Intelligence,
 Department of Energy

also participating:

The Deputy Chief of Staff for Intelligence,
 Department of the Army
 The Director of Naval Intelligence,
 Department of the Navy
 The Assistant Chief of Staff, Intelligence,
 Department of the Air Force
 The Director of Intelligence,
 Headquarters, Marine Corps

The National Foreign Intelligence Board concurs.

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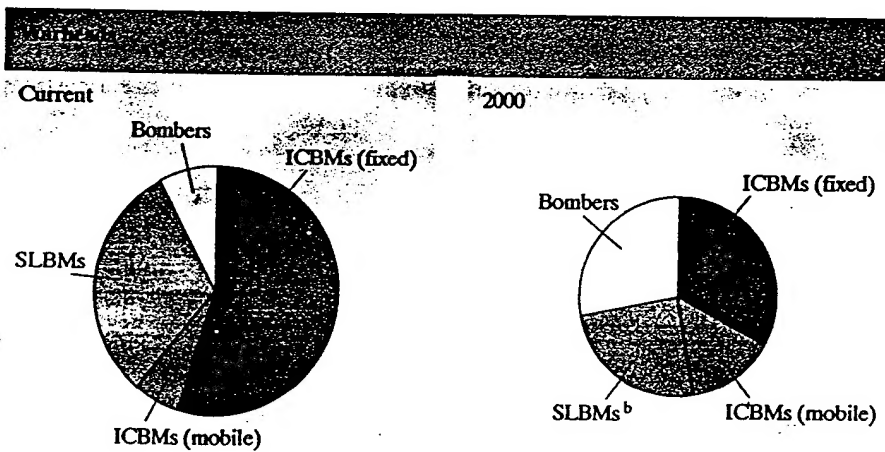
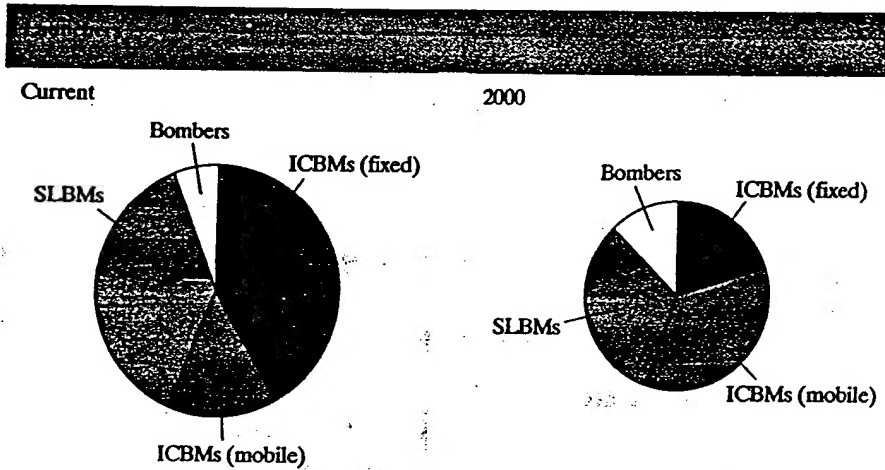
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Soviet Forces and Capabilities for Strategic Nuclear Conflict Through the Year 2000

- The decline of the Soviet Union has caused its leaders to view their national security and superpower status as hinging more than ever on strategic nuclear power. Barring a collapse of central authority or the economy, we expect the Soviets to retain and modernize powerful, survivable strategic forces throughout the next decade.
- We have evidence that five new strategic ballistic missiles are in development—two land based and three sea launched. If these programs continue, four of them would begin deployment in the mid-1990s.
- Nevertheless, we believe that political upheaval and economic decline will lead to the cancellation or serious delay of one or more of these programs. The Soviet economy will be unable to support a sustained military production and deployment effort in the 1990s comparable to that of the 1980s, even for strategic forces.
- Production and deployment rates of some new strategic systems have been reduced as the Soviets adjust their programs in expectation of 35- to 40-percent reductions in both launchers and warheads under START. These force cuts would enable them to realize important savings in spending.
- Soviet nuclear controls appear well suited to prevent the seizure or unauthorized use of nuclear weapons. The ability of the General Staff to maintain its cohesion in the event, for example, of civil war or collapse of the central government, would be a key factor determining whether nuclear controls would break down.

Soviet Intercontinental Attack Forces Under START^a



^a The change in the area of the circles for the year 2000 indicates the projected reduction in the size of the force.

^b The Director of Naval Intelligence projects that the number of SLBM warheads will continue to comprise about one-third of the number of strategic warheads under START.

Key Judgments

New Policy Context

We confront divergent trends in Soviet strategic nuclear policy. On one hand, the diminished Soviet conventional threat to Western Europe has significantly lessened the chances of East-West conflict and thus of global nuclear war. On the other hand, Soviet strategic nuclear forces remain large and powerful, major modernization programs are in progress, and Soviet nuclear strategy evidently retains its traditional war-fighting orientation.

As a result of the crumbling of many other aspects of the Soviet Union's overall superpower position, current Soviet leaders appear to view their security and superpower status as hinging more than ever on strategic nuclear power. Over the past year, statements by various Soviet political and military officials have emphasized the increasing importance of Soviet strategic nuclear power. Barring a collapse of central authority or the economy, it seems clear that Soviet leaders will continue to try to shield their strategic forces and programs from the impact of political unrest and economic decline. At the same time, strategic forces have not been exempt from defense spending cuts since 1988, as procurement spending for both strategic offensive and defensive forces has fallen.

We have significant uncertainties about the future roles of reformers, separatists, hardliners, and the Soviet military itself in charting the course of Soviet strategic policy.¹ The possibility remains, therefore, that a reformist regime might challenge the need to maintain strategic nuclear forces comparable to those of the United States to ensure superpower status and might settle for a lower level of force solely for deterrence.

In light of the grave economic, political, and social difficulties afflicting the USSR, we are more skeptical than we were last year that the Soviets will be able to implement fully in the coming decade their modernization plans

¹ For discussion of four alternative futures, which the Intelligence Community believes captures the major possibilities for how the Soviet political and economic situation might develop over the next five years, see NIE 11-18-91: *Implications of Alternative Soviet Futures*, July 1991.

for their strategic offensive and defensive forces. The Soviet economy will be unable to support a sustained military production and deployment effort in the 1990s comparable to that of the 1980s, even for strategic forces. Indeed, the defense sector is already experiencing some of the disruptions that beset the civilian economy. Some facilities for strategic forces seem to be affected, but these difficulties do not yet appear to have had an appreciable effect on the production or deployment of strategic forces. Observed reductions in Soviet spending on strategic forces appear to be primarily the result of programmatic decisions rather than unplanned disruptions.

Separatist pressure in some republics raises the possibility that the center could lose control over certain strategic production facilities, R&D facilities, and test sites. A loss of control would at least complicate and could severely cripple the overall modernization of strategic forces. Moreover, the ability of the central government to fund defense programs depends on economic revenues from the republics, particularly the Russian Republic, some of which are withholding substantial funds. Separatist problems could also affect the deployment and operation of strategic forces. The Baltic republics, for example, are key to the strategic air defense of the northwestern approach to the USSR. We judge that, even if the central government eventually grants the Baltic republics greater autonomy or independence, it would seek to negotiate basing rights with them to preserve these defenses, at least until they could be relocated or replaced. Gorbachev as well as Yeltsin and other republic leaders are working on arrangements for a new union treaty, but we have large uncertainties about relations between the center and the republics over the long term, and how strategic forces might be affected.

Nuclear Security and Control

The Soviets have established physical security and use-control measures that appear well suited to prevent the seizure or unauthorized use of nuclear weapons. These measures minimize the risk that renegade military officers or other dissidents could gain access to nuclear weapons and threaten to use them. Since the late 1980s, heightened concern about potential internal threats has prompted the Soviets to strengthen security, including removing some warheads from areas of unrest. However, a military coup, the collapse of the central government, or a civil war might threaten the center's ability to maintain these controls. Because of the General Staff's crucial role in controlling nuclear weapons, maintenance of its cohesion in these situations would be a key factor determining whether a breakdown of nuclear controls would occur.

START

At present, a broad array of both strategic offensive and defensive systems are in various stages of development, production, or deployment. The rates of production and deployment of some new systems, however, have been lower in the past few years than we anticipated from past practices. As a result, strategic force modernization has slowed somewhat. We attribute these trends primarily to programmatic decisions made in the late 1980s, in particular Soviet preparations for an eventual START agreement that would allow savings by not building forces beyond START levels.

Soviet political and military leaders have strong incentives to see START implemented. Political leaders perceive an opportunity to reduce military expenditures and create a climate that fosters foreign economic aid. Military leaders see an opportunity to modernize their forces under a treaty that would preserve the relative strategic balance between the United States and USSR, introduce an element of predictability in strategic force planning, and bolster US incentives to reduce spending on strategic and other military forces.

For several years, Soviet military leaders have been adjusting their strategic programs to fit START limits. Soviet strategic intercontinental nuclear forces currently stand at about 2,400 launchers and 10,500 deployed warheads; under probable Soviet planning assumptions for START, these forces would decline by some 35 to 40 percent to 1,400 launchers and 6,700 warheads to comply with the Treaty.

START II

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]A
force of 3,000 to 4,000 weapons would require the Soviets significantly to revise their targeting strategy, but they still would be able to deliver a devastating countermilitary strike. [

]It is unlikely that the General Staff would gear its long-term strategic planning to such an uncertain prospect as START II, although they probably are preparing contingency plans.

Strategic Offensive Forces

The Soviets are moving from a force of which nearly half consists of silo-based ICBMs to one consisting mainly of mobile ICBMs, submarine-launched ballistic missiles (SLBMs), and bombers. Under START, well over half of all Soviet deployed warheads would be on mobile systems, although we project some 2,200 warheads would still be on silo-based ICBMs. Five new ballistic missiles are in development—two land based and three sea based. If these programs continue, we project flight-testing of four of them to begin within the next two to three years with deployments beginning in the mid-1990s. In the midst of political upheaval and economic decline, however, we believe that one or more of the five programs is likely to be canceled or seriously delayed:

- *ICBMs.* The Soviets continue to deploy the new SS-18 Mod 5 silo-based ICBM, which enhances capabilities for prompt attack, and the SS-25 road-mobile ICBM, which significantly improves force survivability. They have apparently completed the deployment of the SS-24 Mod 1 rail-mobile ICBM and the Mod 2 silo-based ICBM. Follow-on missiles to both the SS-25 and SS-24 are currently being developed.
- *SLBMs.* The Soviet SSBN force of the future will consist of considerably fewer submarines than today but will be equipped mostly with modern, long-range SLBMs. The Soviets are modifying Typhoon submarines to carry the SS-N-20 follow-on missile, which is being readied for flight-testing within the next year. In addition to the seven Delta-IV submarines already built, four additional submarines, which are probably modified Delta-IVs, probably are under construction. We project that these submarines will carry a new, liquid-propellant SLBM, which we anticipate will be armed with a single warhead. (There is a chance, however, that the Soviets are not building any new modified Delta-IV SSBNs.) There is evidence that a new SSBN is being developed and that it will be armed with a new, solid-propellant SLBM.
- *Bombers.* The Soviets continue to produce the Blackjack, their new strategic bomber, at the rate of three or four a year. We project about 40 will be deployed by 2000, a lower total than we previously had projected. Production of the Bear H cruise missile carrier has slowed and may soon end.

The Soviets have enough warheads to mount a comprehensive attack against fixed targets worldwide (while still retaining weapons in reserve), whether they conducted a preemptive strike or launched on tactical warning. They would retain the same capabilities under proposed START constraints, but they would have fewer weapons in reserve.

Heavy SS-18 ICBMs will remain the primary and most effective weapons against US missile silos during the next 10 years, but some SLBMs and other ICBMs also will be able to destroy hard targets. The SS-18 Mod 5 is about twice as effective against hard targets as the SS-18 Mod 4 that it is replacing; this difference in effectiveness probably enabled the Soviet military to agree to halve the SS-18 force under START.

Strategic Defensive Forces

The Soviets will continue to devote considerable resources to strategic defense, at least through the early 1990s. Nonetheless, with Soviet military resources declining and arms treaties and budget cuts constraining Western capabilities, pressure is increasing to shrink Soviet strategic defense programs. During the past year, the level of effort has decreased somewhat but with little effect on Soviet strategic defensive capabilities:

- *Antisubmarine Warfare.* The extensive Soviet ASW program has made some gains. The Soviets have an improved, although limited, ability to detect and engage enemy submarines in waters adjacent to the USSR. In the future, the combined effect of multiple layers of ASW systems may constitute a significant challenge to Western submarine operations in Soviet-controlled waters. We judge, however, that through at least the next 15 to 20 years the Soviets will remain incapable of threatening US SSBNs and SSNs in the open ocean.
- *Air Defense.* We project considerably smaller, but heavily modernized strategic air defenses, with a doubling of deployed systems with good capabilities to engage low-altitude vehicles. Modernization programs include deployment of SA-10 surface-to-air-missiles, Foxhound and Flanker interceptors with lookdown/shootdown capabilities, and Mainstay airborne warning and control system aircraft. New versions of these systems also are in development. We judge that, in the event of a major US nuclear attack, the current Soviet air defense system would be unable to prevent large-scale, low-altitude penetration of Soviet airspace. In the coming decade, however, Soviet strategic air defenses will be much more capable of engaging low-altitude vehicles. As a result, penetration by currently deployed US bombers and cruise missiles will become more difficult, particularly in the heavily defended western USSR. If the B-2 bomber and advanced cruise missile achieve the desired level of reduced observability, using tactics appropriate to stealth vehicles they probably would be able to penetrate most of the Soviet Union at low altitude. The capabilities of Soviet air defenses will place some limitations on operations of the B-2 bomber, however.

- *Ballistic Missile and Space Defense.* The modernized Moscow antiballistic missile (ABM) system, which will eventually have 100 silo-based interceptors, provides an improved intercept capability against small-scale attacks. Through the late 1990s, the Soviets are highly unlikely to undertake widespread ABM deployments that would exceed ABM Treaty limits. Current Soviet antisatellite-capable systems pose a threat to US low-altitude satellites, but the only Soviet capability against high-altitude satellites is electronic warfare.
- *Directed Energy Weapons.* The Soviets are continuing efforts to develop high-energy lasers for air defense, antisatellite, and ballistic missile defense applications. There are large uncertainties and differences of view among agencies, however, about how far the Soviets have advanced, the status and goals of weapon development programs, and the dates for potential prototype or operational capabilities. We judge that within the next two decades the Soviets are likely to develop air defense lasers, ground-based antisatellite lasers, and ground-based radiofrequency antisatellite weapons. The Soviets continue to be interested in developing space-based laser weapons.
- *Leadership Protection.* For 40 years, the Soviet Union has had a vast program under way to ensure the survival of its leaders in the event of nuclear war. This program has involved the construction of an extensive network of deep underground bunkers, tunnels, and secret subway lines in urban and rural areas. There is recent evidence that substantial construction activity continues, and we expect the program to move forward along traditional lines.

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